

18. A laundry detergent composition according to claim 1 wherein the cotton polyethyleneimine soil release polymer is of the following formula:

$$H = [H_2N-R]_{n+1} - [N-R]_m - [N-R]_n - NH_2$$

having a modified polyamine formula $V_{(n+1)}W_mY_nZ$ or a polyamine backbone corresponding to the formula:

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having a modified polyamine formula $V_{(n-k+1)}W_mY_nY_k'Z$, wherein k is less than or equal to n, said polyamine backbone prior to modification has a molecular weight greater than about 200 daltons, wherein

i) V units are terminal units having the formula:

ii) W units are backbone units having the formula:

iii) Y units are branching units having the formula:

iv) Z units are terminal units having the formula:

wherein backbone linking R units are selected from the group consisting of C2-C12 alkylene, ${\rm C_4\text{-}C_{12}} \quad \text{alkenylene,} \quad {\rm C_3\text{-}C_{12}} \quad \text{hydroxyalkylene,} \quad {\rm C_4\text{-}C_{12}} \quad \text{dihydroxy-alkylene,} \quad {\rm C_8\text{-}C_{12}} \quad \text{dihydroxy-alkylene,} \quad {\rm C_8\text{-}C_{12}} \quad {\rm C_{12}} \quad {\rm C_{12$ -(CH2CH(OR2)CH2O)2- $-(R^{1}O)_{x}R^{5}(OR^{1})_{x}$ -(R¹O)_xR¹-, dialkylarylene, $(\mathsf{R}^1\mathsf{O})_y\mathsf{R}^1(\mathsf{OCH}_2\mathsf{CH}(\mathsf{OR}^2)\mathsf{CH}_2)_{w^-}, \ -\mathsf{C}(\mathsf{O})(\mathsf{R}^4)_r\mathsf{C}(\mathsf{O})\text{--}, \ -\mathsf{CH}_2\mathsf{CH}(\mathsf{OR}^2)\mathsf{CH}_2\text{--}, \ \text{and mixtures thereof};$ wherein R^1 is C_2 - C_6 alkylene and mixtures thereof; R^2 is hydrogen, -(R^1O)_XB, and mixtures thereof; R^3 is $\mathsf{C}_1\text{-}\mathsf{C}_{18}$ alkyl, $\mathsf{C}_7\text{-}\mathsf{C}_{12}$ arylalkyl, $\mathsf{C}_7\text{-}\mathsf{C}_{12}$ alkyl substituted aryl, $\mathsf{C}_6\text{-}\mathsf{C}_{12}$ aryl, and mixtures thereof; R4 is C1-C12 alkylene, C4-C12 alkenylene, C8-C12 arylalkylene, C6-C10 arylene, and mixtures thereof, R5 is C1-C12 alkylene, C3-C12 hydroxyalkylene, C4-C12 $C(O)(R^4)_rC(O)_{-}$, $-CH_2CH(OH)CH_{2-}$, $-CH_2CH(OH)CH_2O(R^1O)_vR^1-OCH_2CH(OH)CH_{2-}$, and mixtures thereof; R⁶ is C₂-C₁₂ alkylene or C₆-C₁₂ arylene; E units are selected from the group consisting of hydrogen, C_1 - C_{22} alkyl, C_3 - C_{22} alkenyl, C_7 - C_{22} arylalkyl, C_2 - C_{22} hydroxyalkyl, - $(\mathsf{CH}_2)_p \mathsf{CO}_2 \mathsf{M}, \ -(\mathsf{CH}_2)_q \mathsf{SO}_3 \mathsf{M}, \ -\mathsf{CH}(\mathsf{CH}_2 \mathsf{CO}_2 \mathsf{M}) \mathsf{CO}_2 \mathsf{M}, \ -(\mathsf{CH}_2)_p \mathsf{PO}_3 \mathsf{M}, \ -(\mathsf{R}^1 \mathsf{O})_x \mathsf{B}, \ -\mathsf{C}(\mathsf{O}) \mathsf{R}^3, \ \mathsf{and}$ mixtures thereof; provided that when any E unit of a nitrogen is a hydrogen, said nitrogen is not also an N-oxide; B is hydrogen, C₁-C₆ alkyl, -(CH₂)_aSO₃M, -(CH₂)_DCO₂M, - $(\text{CH}_2)_{\alpha}(\text{CHSO}_3\text{M})\text{CH}_2\text{SO}_3\text{M}, \quad -(\text{CH}_2)_{\alpha}(\text{CHSO}_2\text{M}) - \text{CH}_2\text{SO}_3\text{M}, \quad -(\text{CH}_2)_{\text{D}}\text{PO}_3\text{M}, \quad -\text{PO}_3\text{M}, \quad \text{and} \quad -\text{PO}_3\text{M}, \quad -\text{PO}_3\text{M$ mixtures thereof; M is hydrogen or a water soluble cation in sufficient amount to satisfy charge balance; X is a water soluble anion;

k and k' have the value from 1 to about 15; m has the value from 4 to about 400; n has the value from 0 to about 200; p has the value from 1 to 6, q has the value from 0 to 6; r has the value of 0 or 1; w has the value 0 or 1; x has the value from 1 to 100; y has the value from 0 to 100; z has the value 0 or 1.

- 19. A laundry detergent composition according to claim 1 wherein the cotton polyethyleneimine soil release polymer is selected from the group consisting of polyethyleneimine 1800E7 and its amine oxide derivatives, polyethyleneimine 1200E7 and its oxidised and/or quaternised derivatives, polyethyleneimine 600E20, and/or mixtures thereof.
- 20. A laundry detergent composition according to claim 1 further comprising a surfactant.
- 21. A laundry detergent composition according to claim 20 further comprising a nonionic surfactant.
- 22. A laundry detergent composition according to claim 21 wherein the nonionic surfactant is an alkyl ethoxylated nonionic surfactant with a C8 to C20 chain length, and a degree of ethoxylation from 2 to 9.
- 23. A laundry detergent composition according to claim 22 wherein the alkyl ethoxylated nonionic surfactant has a C12 to C16 chain length.

alkyl methyl glucamide surfactant with an alkyl chain length from C8 to C20.

26. A laundry detergent composition according to claim 25 wherein the alkyl methyl glucamide surfactant has an alkyl chain length from C12 to C18.

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27. A laundry detergent composition according to claim 1 further comprising a builder.

28. A laundry detergent composition according to claim 27 further comprising a builder selected from the group consisting of zeolite, sodium tripolyphosphate, layered silicate and/or mixtures thereof.

29. A laundry detergent composition according to claim 1 further comprising a conventional soil release polymer.

30. A laundry detergent composition according to claim 29 further comprising a conventional soil release polymer selected from the group consisting of an anionically end capped polyester, diethoxylated polypropylene terephthalate, and/or mixtures thereof.

31. A method of cleaning a fabric with a laundry detergent composition according to claim 1.

The support for these amendments is found in the claims as originally filed. These amendments are being entered to bring the claims into conformance with, *inter alia*, 37 CFR §1.75; no new matter is added.

Respectfully submitted for Applicants,

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